

Digitized by the Internet Archive
in 2017 with funding from
CLIR

<https://archive.org/details/chinafieldcatalo00stei>

B.R. Stein
1988

China

Catalogue #1-111 (Accn. 12781)

Journal

[illegible]

B.R. Stein
1988

China
Menglung, Yunnan Prov.

Catalogue #1-111 (Accn. 12781)

Stein, B.R.
1988

accn 12781

3 Aug.

ca. 2 km. from Menglung, Inst. of Ecology Field Sta.,
Menglung, Yunnan, PRC

1. Y10600 ^{E. ~~le~~} Rousettus ♂ 110-10-18-20=50g forearm 65mm.
calcar 6mm.
alcoholic, tissues - BRS

ectoparasites - A.G. Cleveland, Texas Wesleyan

~~stomach/intestines - G. Hickling, New Zealand~~

2. Y10601 Rousettus ♂ 121-16-21-23=62g forearm 76mm
calcar 7mm
alc., tissues - BRS

ectos - A.G. Cleveland

3. Y10602 Rattus ~~nitidus~~ (?) ♂ 310-148-30-19=78gr.

ectos - G. Hickling, New Zealand

scrotal

Gut length - " " "

tissues, alc. - BRS

eyes - V. Choate

2094204. SNAKE *Columba spiralis* SV 22.3 mm

Killed 3 Aug 88

tissues - minimal

coll. by Reservoir Dam, Huiron, Beijing Municipality

29 July 1988

(50 km. NE Beijing)

ventral surface of tail scraped

5. Y10603 Rousettus ♂ 105-13-20-20=44g forearm 65mm
calcar 6mm
alc., tissues - BRS

ectos - J. Martin

Stein, B.R.
1988

Menglung Field Sta. - CONT.

- 3 Aug. 6. Y10604 *Rousettus* ♀ 102-18-21=37g. forearm 64 mm
alc., tissues - BRS calcar 4 mm
ectos - M. Cleveland
7. Y10605 *Rousettus* ♂ 110-17-16-18=35g. forearm 65 mm
alc., tissues - BRS calcar 5 mm
Ectos - J. Martin
8. Y10606 *Rousettus* ♀ 108-14-15-18=33 g. forearm 65 mm
alc., tissues - BRS calcar 5 mm.
Ectos - J. Martin DEAD IN BAG
9. Y10607 *Rousettus* ♂ 138-22-21-19=70g. forearm=75
alc., tissues - BRS calcar = 6 mm
Ectos - J. Martin DEAD IN BAG
10. Y10608 *Rousettus* ♀ 118-15-17-19=41g. forearm=65
alc., tissues - BRS calcar = 6 mm.
Ectos - J. Martin
11. Y10609 *Scotophilus heathii* ♂ 144-61-13-18=36 g.
alc., tissues - BRS forearm = 60 mm ~~calcar = 6 mm~~ + one vial blood
Ectos - M. Cleveland
12. LIZARD *Hemidactylus* sp.
took tissues - minimal
on window ledge of Field Sta. bldg. - 8:00 pm.

#209421

Stein, B.R.
1988

Rubber Trees, Tea, + Coffee Plant Cultivated "Forest" adjacent to
small patch of 2^o forest, Kunming Agric. Exper. Stat., Menglung, Yunnan

Aug. 13. TOAD coll. 4 Aug. Killed 5 Aug.

209425

tissues, alc. - BRS + blood

In laboratory at Kunming Experimental Stat., Menglung, Yunnan

#2094234.

small LIZARD *Hemidactylus* sp.

no tissues

In bedroom at Kunming Experimental Stat., Menglung, Yunnan

15.

Hipposideros bicolor

♀ 73-27-6-22 = 6g. forearm 45

Y10610

- skin + skull

- A.G. Cleveland

+ partial skel.

tissues - BRS

H, L, Muscle

~~XXXXXXXXXXXX~~

Primary Forest Area #1, Km. 51-52 on road to Menglung,
Yunnan Prov., PRC

16.

SMALL TOAD

Microhyla sp.

209426

no tissues

17.

Y10611 *Dremomys rufigenus*

♀ 370-180-47-24 = 204g

tissues - BRS

(2 vials)

skin + skull - A.G.C.

+ partial skel.

gut length - G. Hickling

~~XXXXXXXXXXXX~~ eye lens - V. Choate

KILLED BY HUNTER

In bedroom at Kunming Experimental Sta., Menglung, Yunnan

209422

18.

GECKO

Hemidactylus sp.

no tissues

6 Aug.

Near Bridge by Laboratory, Kunming Exper. Sta., Menglung, Yunnan

19.

Rattus nitidus (?)

♀ 307-159-32-18 = 85g.

tissues, alc - BRS (2 vials)

6 placental scars (5+1)

stomach - G. Hickling

nipples regressed.

Y10612

NO ECTOS

repro. organs - A.G.C.

tein, B.R.

Primary Forest Area #1, Kunming Exp. Sta., Menglung, Yunnan

6 Aug. 20. Y10613 ^{Niviventer} ~~Rattus~~ niviventer(?) ♀ 324-188-31-25 = 66 gr.
sharply bicolored tail
tail > HB by ~30%
spiny fur, buff belly
nipples - 2 pr. pectoral
2 pr. pelvic
postlactating - no placenta
scars visible
→ - skeleton - body had started to decay
NO TISSUES

G. Hickling - guts

Primary Forest Area #2, Kunming Exp. Sta., Menglung, Yunnan

7 Aug. 21. Y10614 Cynopterus sphinx(?) ♀ 89-9-14-18 = 25 gr.
skin + skull - A.G.C.
+ partial skel.
tissues. - B.R.S.
forearm 66 mm
calcar 4.5 mm.

NO ECTOS (dead in bag) - prep. 8 Aug. '88

22. Y10615 Roussettus ♀ 103-110-15-17 = 45 gr.

ECTOS - J. Martin

forearm 69 mm
calcar 5 mm

skin, skull, partial skel - A.G.C.

tissues - BRS

8 Aug 23. Y10616 Suncus murinus ♀ 163-79-15-10 = 16 gr.

skin + partial skel - A.G.C.

tissues - BRS

gut meas. - G. Hickling

NO ECTOS

24. Y10617 Rattus ♀ 340-165-32-20 = 122 gr.

skin + partial skel - A.G.C.

tissues - BRS

gut - G. Hickling

ECTOS

Wh. belly, tail black, dorsum headft. gray w/ wh. edges

Stein, B.R.
1988

By kitchen at Kunming Exp. Sta., Menglung, Yunnan

25. Y10618 Rattus ♂ 334-182-32-24=142 gr.

alc., tissues - BRS very scrotal

gut length - G. Hickling

NO ECTOS

26. Y10619 Rattus ♀ 301-152-29-21=87 gr.

alc., tissues - BRS nipples 3 inguinal pres., 2 pectoral

gut length - G. Hickling perforate

NO ECTOS

~~ant. small extra~~

1° Forest area #1, Kunming Exp. Sta., Menglung, Yunnan

#209424 27. small SKINK - no tissues Tropidophorus

9 Aug 28. Y10620 Rhyzomys pruinosus ♂ 430-115-54-22-

Collected 4 Aug MENG LUNG STATION

Ectos J. Martin

Tissues B. Stein (13)

Chromosomes V. Choate ^{took femur} Alcoholic B. Skin

Eyes V. Choate

Endos AGC

Testes 20 mm

Bot from hunters

29 Y10621 Rousettus leu

♀ 105-10-14-23-40g

MENG LUNG STATION

forearm: 60 mm calcar: 7 mm

No Ectos SM

Eyes V. Choate

Skin & partial skel J. Martin

Tissues J. Martin

30. Y10622 Rousettus leu

♂ 116-12-21-19-52 g

MENG LUNG STATION

forearm 72 mm calcar 6 mm

No Ectos SM

Eyes V. Choate

Skin & partial skel J. Martin

Tissues: J. Martin

area #2

Leu, BR.
1988

9 AUG 1988

31. Y10623 Rousettus leu. ♂ 120-10-16-18-40g
MENG LUNG STATION
Ectos J. Martin forearm: 66mm calcar: 7mm
Eyes V. Choate Skin & partial skel: J. Martin
Chromosomes V. Choate Tissues: J. Martin

10 AUG 1988 32. Y10624 Pipistrellus mimus ♀ 78-34-7-10-6g
MENG LUNG STATION forearm 32.3mm
NO Ectos JLN Skin & partial skel: A.G.C.
Chromosomes V. Choate Tissues: J. Martin
Eyes V. Choate

33. Y10625 Rousettus ♀ 123-11-22-18 forearm 74.9
calcar 7
tissues - BRS ECTOS - J. Martin
skin, skull, partial skel - A.G.C. prep. E. Verwers
chromo, eyes - V. Choate

34. Y10626 Rousettus ♂ 120-9-20-19 forearm 73mm
calcar 7mm
alc. ~~preserved in alcohol~~ - A.G.C.
ECTOS - J. Martin prep. A.G.C.
NO TISSUES

35. Y10627 Rattus rattus ♀ 345-172-34-23
tail all dark, belly white; 3 pr. pectoral, 3 pr. inguinal.
Area #2
tissues, alc - BRS
eyes, chromo - V. Choate
gave birth in trap to 5 yg (2♂, 3♀)
Dorsum w/ lg. black bristles mixed w/ hispid-brown
coloration

Yg. preserved in McDowell's fixative as Y10627a-e
Repro. tract preserved in McDowell's for anal.

cin, BR.
1988

→ Macroglossus sobrinus - K. Koopman 2/90

Area #2, Kunming Exp. Sta., Menglung, Yunnan Prov., PRC

Aug. 36. Y10628 ~~Cynopterus sphinx~~ (?) ♂ 85-10-12-17 = 22 gr.
tissues, alc. - BRS forearm = 47 mm
calcar = 3 mm

Dead in Net - not picked out for almost 24 hrs.

NO ectos

37. Y10629 ~~Rousettus~~ ~~leu.~~ ♂ 100-11-15-24 = 47 gr.
alc, tissues - BRS forearm = 73 mm
calcar = 6 mm

NO ectos - dead in net.

(tissues may be a bit deteriorated).

wh. along edges of ear, rusty at throat

2 Aug. Rubber tree, coffee, tea exper. area, Kunming Exp. Sta., Yunnan

38. Y10630 Cynopterus ♀ 110-9-11-22 = 63 gr. forearm 75 mm
calcar 6 mm
ECTOS - A.G.C.

pregnant - lg. yg. 3 2 lg. abdominal nipples

yg. preserved as Y10630a in McDowell's Fixative
Skin + partial skel + skull - A.G.C.

tissues - BRS (2 vials)

~~BRN Y10631~~ Eyes - V. Choate

1° Forest Area #2, Kunming Exp. Stat., Menglung, Yunnan

39. Y10631 Cynopterus sphinx ♀ 108-11-15-22 forearm 75 mm
calcar 5 mm
ECTOS - A.G.C. (+ 1 leech) wt = 53 gr.

2 mid abdominal mammae, preg., 1 yg. in pae -
preserved as Y10631a in McDowell's Fixative

tissues, alc - BRS

40. ~~Y10632~~ Y10632 Hipposideros ♂ 108-17-12-25 = 19 gr.
forearm 60 mm
dorsum lt. brown, darker on ends of hair.

ECTOS - A.G.C.

chromo., eyes - V. Choate

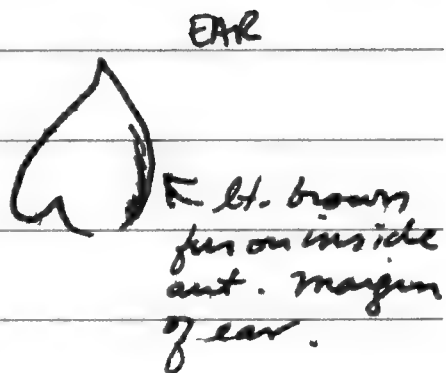
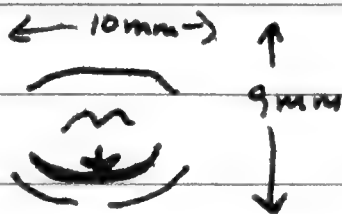
tissues - BRS

skin, skull, partial skel - A.G.C. testes 5.0 mm

Stem, BR.
1988

12 Aug.

Y10632 CONT.



Bat Cave, Menglung, Yunnan Prov.

41. Y10633 *Rhinolophus*

♀ 70-20-7-18 = 6.5 gr.
forearm 42 mm

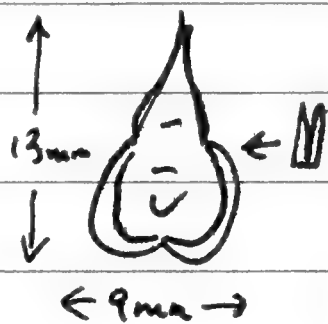
ECTOS - A.G.C.

chromo, eyes - V. Choate

skin + skull + partial skull - A.G.C.

tissues - BRS

velvety dorsum, lt. brownish



Bat Cave, Menglung, Yunnan Prov.

3 Aug. 42. Y10634 *Rhinolophus*

♂ 65-19-6-19 = 7 gr. forearm 45

Ectos - A.G.C.

skin + ^{partial}skel + skull - A.G.C.

eyes - V. Choate

tissues - BRS

lg. capsule on rt. ear
opened to reveal sm.
larval form.

animal dead in net over top of cave.

~~Y10633 + 34~~

(Y10633 + 34 - same sp. ^{prob.})

Area #2, Menglung, Yunnan Prov.

43. Y10635 *Cynopterus sphinx*

♀ 110-4-13-18.5 = 40 gr
forearm 71
calcar 7

ECTOS

skin, skull, partial skel - A.G.C.

tissues - BRS

caught 12 Aug.

Stein, BR
1988

Bat Cave, Menglung, Yunnan Prov.

13 Aug. 44. Y10636 *Rhinolophus* ♀ 68-19-6-19 = 8g.
forearm 45

ECTOS

eyes + chromo - V. Choate

tissues - BRS

skin, skull, ^{partial}skel - AGC

lg. capsule on on left ear - hard, calcified, will not open. Another capsule on left pseudotragus + capsule saved w/ the larvae

45. Y10637 *Hipposideros armingeri* ♀ 155-62-18-32 = 44g
ECTOS forearm = 90

chromo - V. Choate

tissues - BRS

skin, skull, ^{partial}skel - AGC

a cobra-head-like protuberance, paired, innervated cranial to vaginal opening!? Only right one developed, left one diminutive.

Removed from study skin + put in McDowell's fixative.

46. Y10638 *Pipistrellus minimus* ♀ 55-36-7-12 = 3g.
skin + skull + ^{partial}skel - AGC. forearm - 35 mm

no tissues

ECTOS

chromo - V. Choate

47. Y10639 *Rhinolophus* ♀ 70-24-9-18 = 8g.
forearm = 44.5

skin + skull + ^{partial}skel - AGC.

tissues - BRS

DIED IN BAG

ECTOS

3 capsules found at base of rt. ear; removed.

tein, BR
1988

Area #2 Menglun, Yunnan Prov.

13 Aug. 48. V10640 *Rattus rattus* ♀ 370-220-32-25 = 138g.
call. 12 Aug. 3 pr. mammae
skin, skull, + partial skel - C. Wozencraft (A.G.C.)
tissues - BRS 3 vials
gut - G. Hickling repro. tract - ABC
EYES, chromo - V. Choate

49. ~~V10640~~ V10641 *Rousettus leu.* ♀ 125-16-22-20 = 59g.
call. 12 Aug. forearm = 82mm
1 pr. mammae
tissues, alc - 2 vials - BRS
ECTOS

#1 Bat Cave, Menglun, Yunnan Prov.

50. V10642 *Rhinolophus* ~~roulei~~ ^{sinicus} ♀ 70-25-10-18 = 8g.
forearm 47mm
ECTOS

alc., tissues - BRS (A.G.C. may want for ID)



51. V10643 *Rousettus* ♂ 98-11-20-17 = 31g.
forearm 65
NO tissues - DEAD in NET. I was out in field.
y.g. bat
ECTOS

skin + partial skel + skull - ABC.

52. V10644 *Aselliscus stoliczkanus* ♂ 78-30-5-11 = 5g.
~~Hypodactylus~~ forearm 42mm
NO tissues

skin, skull, partial skel - ABC

ECTOS



Wh. breast, dorsum lt. brown w/ base hairs whitish

Stein, BR
1988

#2 Bat Cave, ~10 km. down river from cave #1

- 14 Aug. 53. Y10645 Taphozous ♀ 130-23-10-28 = 35g.
ECTOS forearm 76
skin, skull, partial skel. - C. Wozencraft (A.G.C.)
tissues - BRS
54. Y10646 Tadarida ♀ 116-45-16-18 = 25.5g.
preg. = Y10646a preserved in McDowell's Fixative forearm = 49
wrinkle lip
ECTOS
skin, skull, partial skel - AGC.
tissues - BRS
55. Y10647 Tadarida ♂ 120-43-11-20 = 22g.
ECTOS forearm 49 mm
wrinkle lip
tissues - BRS
skin, skull, partial skel - AGC
56. Y10648 Taphozous ♀ 121-25-7-20 = 39g.
ECTOS forearm 75
calcar 20
tissues - BRS
skin, skull, partial skel - AGC
57. Y10649 Tadarida ♀ 119-44-11-22 = 21.9g.
wrinkle lip forearm 48
calcar = 9
ECTOS
skin, skull, skel - C. Wozencraft (A.G.C.)
tissues - BRS
58. Y10650 Tadarida ♀ 135-41-9-20 = 25g.
preg. forearm 49
alc - AGC! calcar - not obs.
ECTOS NO tissues

Stein, BR
1988

#2 Bat Cave CONT.

Aug.	59.	Y10651 ^{Chaerephon plicata} Fadenida ♂	114-40-11-21 = 22g.
		alc., tissues - BRS	forearm 50 calcar 10
		ECTOS	- Dead in net
	60.	Y10652 Taphozous	♂ 120-28-11-25 = 32g.
		ECTOS	forearm 73 calcar 7(?)
		NO tissues, alc - AGC.	Dead in net
	61.	Y10653 Taphozous	♀ 120-31-14-25 = 34g.
		ECTOS	forearm 74 calcar 22
		alc., tissues - BRS	Dead in net
	62.	Y10654 Taphozous	♀ 116-25-16-24 = 32g.
		ECTOS	forearm 74 calcar 22
		alc., tissues - BRS	Dead in net
	63.	Y10655 Taphozous	♀ 130-28-12-27 = 40g.
		ECTOS	forearm 75 calcar 20
		alc., tissues - BRS	Dead in net
		preg. lactating	
	64.	Y10656 Taphozous	♂ 123-22-10-25 = 40g.
		ECTOS	rust-colored fur ventral surface of neck forearm 75 calcar 21
		alc., tissues - BRS	Dead in net
	65.	Y10657 Taphozous	♂ 123-28-13-26 = 32g.
		alc., tissues - BRS	forearm 75 calcar 21
		ECTOS -	Dead in net
	66.	Y10658 Taphozous	♀ 117-25-13-25 = 32g.
		ECTOS	forearm 74 calcar 20
		alc., tissues - BRS	Dead in net
	67.	Y10659 Taphozous	♀ 125-27-16-23 = 31g.
		ECTOS	forearm 74 calcar 19
		alc., tissues - BRS	Dead in net

Hein, BR
1988

#2 Bat Cave, CONT.

- 4 Aug. 68. Y10660 Taphozous ♀ 118-27-12-24 = 30g.
ECTOS forearm 35
calcar 19
alc., tissues - BRS Dead in net
69. Y10661 Taphozous ♀ 114-25-11-23 = 32g.
ECTOS forearm 73
calcar 19
alc., tissues - BRS ~~♀ 114-25-11-23 = 32g.~~
Dead in net

5 Aug #2 Bat Cave CONT.

70. Y10662 Taphozous ♀ 123-26-11-26 = 29g.
coll. 14 Aug. forearm 71
calcar 20
ECTOS
alc., tissues - BRS
71. Y10663 Taphozous ♀ 125-27-10-25 = 33g.
coll. 14 Aug. forearm 74
calcar 19
ECTOS
skin, skull, partial skull - AGC.
tissues - BRS + muscle
72. Y10664 Taphozous ♀ 116-20-9-23 = 29g.
ECTOS forearm 72
calcar
coll. 14 Aug.
tissues - BRS + muscle



- Area #2, ~~Mahlung, yunnan~~
73. Y10665 Aselliscus stoliczkanus ♂ 75-36-6-11 = 4.5g.
coll. 14 Aug. - dead overnight forearm 41
calcar 7
Alc. ~~AGC~~ - AGC
photo of face - AGC.

Wh. belly, deep set ears + eyes, ears almost tubular
not tissues!

Stein, BR
1988

~~Area #2, Menglung~~ Area #2, Menglung

- 15 Aug. 74. Y10666 Rhinolophus ♀ 74-18-6-18 = 7.5 gr.
coll. 14 Aug. - dead overnight forearm 45 mm
alc. - AGC. calcar 7 mm
no tissues

~~This spec. has 3 hard calcaneous capsules left intact.~~

Area #2, Menglung, Yunnan Prov.

75. Y10667 Rousettus ♀ 133-18-21-20 = 52 gr.
coll. 14 Aug. - dead forearm 75
alc., tissues - BRS calcar 7
chromo - V. Cheate

#2 Bat Cave

76. Y10668 ^{chaerephon} ~~Tadarida~~ plicata plicata ♀ 110-36-11-20 = 22 gr.
coll. 14 Aug forearm 48
preg. - fetus preserved as Y10668 calcar 7
ECTOS

tissues, alc - BRS + 1 vial blood!

77. Y10669 Tadarida ♂ 118-48-10-18 = 20 gr.
coll. 14 Aug. forearm 50
ECTOS calcar 14

skin, skull, + partial skull - AGC.

tissues - BRS + muscle

chromo - V. Cheate

78. ~~Y10670~~ ^{chaerephon} ~~Tadarida~~ plicata plicata ♂ 114-40-9-21 = 20 gr.
coll. 14 Aug. forearm 48
calcar 10

ECTOS

tissues, alc - BRS

chromo - V. Cheate

Stem, BR
1988

#2 Bat Cave

- 15 Aug. 79. Y10671 ^{Chaerephon}~~Tadarida~~ plicata ♀ 115-43-10-21 = 24 gr.
Coll. 14 Aug. preg. - AGC has fetus forearm 48
calcar 7
Chromo - V. Choate - from sternum
alc., tissues - BRS + muscle + 1 vial blood
ECTOS (chest gone - perhaps should make skel.)
80. Y10672 ^{Chaerephon}~~Tadarida~~ plicata ♀ 117-42-11-20 = 25 gr.
coll. 14 Aug. forearm 49.5
calcar 11
preg. - fetus preserved by A.G.C.
ECTOS
alc., tissues - BRS
81. Y10673 ^{Chaerephon}~~Tadarida~~ plicata ♀ 115-41-9-21 = 25 gr.
coll. 14 Aug. forearm 50
calcar -
ECTOS
preg. - fetus used to extract chromo.
tissues, alc. - BRS + 1 blood vial
82. Y10674 ^{Chaerephon}~~Tadarida~~ plicata ♀ 109-42-9-19 = 24 gr.
coll. 14 Aug. forearm 48
calcar -
preg. - fetus preserved in formalin - BRS
alc., tissues - BRS + 1 blood vial
ECTOS
83. Y10675 ^{Chaerephon}~~Tadarida~~ plicata ♀ 110-36-9-22 = 22 gr.
coll. 14 Aug. forearm 49
calcar -
alc., ~~tissues~~ - BRS - spec. bloated!
Dead in bag? ← no tissues
ECTOS
84. Y10676 ~~Tadarida~~ (?) ♂ 114-46-10-21 = 20 gr.
coll. 14 Aug. forearm 48
calcar -
ECTOS
Skin, skull, partial skel - AGC
tissues - BRS + muscle

Hein, BR
1988

#2 Bat Cave

- 15 Aug. 85 Y10677 ^{Chaerephon} ~~Tadarida~~ plicata ♀ 114 - 37-12-20 = 19g.
ECTOS forearm 48
calcar —
alc., tissues - BRS + 1 blood vial
coll 14 Aug.
- 86 Y10678 ^{Chaerephon} ~~Tadarida~~ plicata ♂ 115 - 41-10-23 = 18g.
ECTOS forearm 50
calcar —
coll. 14 Aug.
- 87 Y10679 ^{Chaerephon} ~~Tadarida~~ plicata ♀ 121 - 47-13-20 = 27g.
ECTOS forearm 49
calcar —
coll. 14 Aug.
- 88 Y10680 Taphozous ♂ 116 - 32-16-24 = 30g.
ECTOS forearm 72
calcar 20
coll. 14 Aug.
- 89 Y10681 Taphozous ♂ 118 - 31-14-26 = 28g.
ECTOS forearm 72
calcar 20
coll. 14 Aug.
- 90 Y10682 Taphozous ♂ 118 - 30-12-24 = 31g.
ECTOS forearm 72
calcar 20
coll. 14 Aug.
- skin, skull, ^{partial} skel - AGC
tissues - BRS + muscle + some blood

Stein, BR
1988

#2 Bat Cave

15 Aug 91 Y10683 Taphozous ♀ 123-35-15-27=33 gr.
coll. 14 Aug forearm 74
calcar 20
ECTO

chromo (forearms) - V. Choate

alc., tissues - BRS (some blood w/ tissues)

92 Y10684 Taphozous ♀ 123-35-15-26=36 gr.
coll. 14 Aug forearm 76
calcar 21

ECTOS

lactating - nipples in
upper pectoral
area

Skin, skull, partial skel - AGC.

⊗ cinnamon brown pelage → diff. color phase?
diff. sp.?

tissues ~~skin~~ - BRS

w/ muscle + some blood

eyes - V. Choate

93 Y10685 Taphozous ♀ 123-33-15-27=36 gr.
coll. 14 Aug. forearm 72 mm
calcar 21

ECTOS (lice)

lactating - nipples in
upper pectoral
area

⊗ cinnamon brown pelage

Skin, skull, + partial skel - AGC

tissues - BRS

+ muscle

eyes - V. Choate

94 Y10686 Taphozous ♂ 119-30-13-25=32 gr.
coll. 14 Aug. forearm 74
calcar 21

ECTOS

alc., tissues - BRS

Area #2, Menglung, Yunnan Prov.

95 Y10687 Cynopterus ♂ 105-10-17-21=46 gr.
forearm 73
calcar 7

ECTOS

alc., tissues - BRS + 2 vials blood

tein, BR
1988

Area #3, Menglung, Yunnan Prov. - ^{steep slope} amongst rocks

15 Aug 96. Y10688 *Rattus*(?) ♀ 320-180-28-22 = 70g.

2 pr. pectoral + 2 pr. abdominal mammae
tail bicolored, distal 1/4 bleached white,
tip of tail w/ dark tuft, $T > HB$
dorsal surface brownish grizzled w/ black
HF + forefeet white dorsally
white ventor w/ distinct demarkation laterally
throat white

gut length - G. Hickling
tissue - BRS + muscle (2 vials) <sup>repro. tract w/
4 embryos</sup>

Skull (only?) - AG.C. (for museum to I.D.)

ECTOS eyes - V. Choate chromo (femur) - V. Choate

97. Y10689 *Rattus*(?) ♂ 320* - 158* - 30 - 24 = 106g
* tail broken - tip off

gut length - G. Hickling

tissue + alc - BRS

ECTOS

Same body description as Y10688

EYES + chromo - V. Choate (femur)

~~all the rest of the body~~ eye w/ cataract

98. Y10690 *Rattus* ~~the~~ *rattus* ♀ 380-210-33-24 = 122g.

tail monocolor, bl. scaly, $T > HB$

nipples - 2 pectoral, 3 pelvic

eyes - V. Choate + chromo (sternum)

gut - G. Hickling

alc., tissues - BRS

rt. hindft. caught in Sherman trap
fur grizzled, wh. belly

Stem, BR
1988

Area #3, Menglung, Yunnan Prov. - CONT.

6 Aug. 99 Y10690 *Niviventer* (?) ♀ 318-176-29- = 68g.

~~holder~~ 2 pelvic, 2 pectoral mammae
bicolor tail, buff belly.

light dorsum on HF

fur w/ spines dorsally

nibbled by ant → no ear measurement

collector = BRS

alc, tissues - BRS + muscle

4 embryos

→ caught in snap trap in sparsely wooded area
gut - G. Hickling

100 Y10692 *Niviventer*! fulvescens ♂ 340-190-31-20 = 88g.

coll. 15 Aug.

ECTOS

dorsal coarse black guard hairs on
rust brown, ventor creamy. tail
bicolored. cheeks light brown.

tissues, BRS (2 vials)

Tops of feet brown w/ ~~wh.~~ wh. margin

gut - G. Hickling

skin, skull, partial skel - AGC

eyes, chrono - V. Choate

Bat Cave #4, ca. 10km E. Menglung, on opp. side of slope
of cave #2

101 Y10693 *Hipposideros armiger* ♀ 165-58-18-34 = 57g.

ECTOS

forearm 93
calcar 23

alc., tissues - BRS

chrono - V. Choate (forearm)

Brown ~~grey~~ body color on dorsum; w/ cobra

102 Y10694 *Hipposideros armiger* ♂ 162-55-16-33 = 45g.

grey dorsum

forearm 93
calcar 21

ectos

Stein, BR
1988

Bat Cave #4, CONT.

6 Aug.

tissues - BRS

chromo - V. Choate

skin, skull, partial skel - AGC

103

Y10695 *Hipposideros armiger* ♀ 159-58-16-34 = 56g

forearm 93
calcar 20

ECTOS

tissues - BRS

skin, skull, partial skel - AGC

eyes, chromo - V. Choate

dark brown dorsum, lt. brown ventor

104

Y10696 *Hipposideros armiger* ♀ 157-67-19-32 = 55g

forearm 94
calcar 22

dark brown dorsum

ECTOS

alc., tissues - BRS

105

Y10697 *Hipposideros armiger* ♀ 162-65-11-35 = 45g

forearm 97
calcar 19

^{gray}
~~dark brown~~ dorsum

ECTOS

alc., tissues - BRS

106

Y10698 *Hipposideros armiger* ♀ 160-62-12-36 = 54g

forearm 97
calcar 20

dark brown dorsum

ECTOS

alc., tissues - BRS

107

Y10699 *Hipposideros armiger* ♂ 155-60-16-33 = 57g

forearm 99
calcar 22

ECTOS

alcoholic - AGC (wanted "complete" spec)

~~tissues - BRS~~

NO tissues

dark brown pelage

Stein, BR
1988

- Aug. 108 Y10700 *Hipposideros armiger* ♀ 155-58-11-35=50g_n
ECTOS forearm 91
calcar 19
eyes, chromo - V. Choate
skin, skull, partial skel - AGC 8817
tissues - BRS
cinnamon brown pelage
- 109 Y10701 *Hipposideros armiger* ♀ ¹⁵³~~149~~-58-16-34=46g_n
alc, tissues - BRS forearm 93
calcar 23
no ECTOS - dead in bag
grey pelage
- 110 Y10702 *Hipposideros armiger* ♂ 157-61-17-35=53.5g_n
ECTOS forearm 98
calcar 23
alc, tissues - BRS
dark brown
- 111 Y10703 *Hipposideros armiger* ♀ 162-62-16-35=52g_n
ECTOS forearm 92
calcar 21
dark brown
alc, tissues - BRS

Stein, BR
1988

Elevation / Lat. / Long.

15 Aug.

From C. Wozencraft

Menglung 21° 55' N 101° 17' E ca. 600 m.

Area #1 21° 57' N 101° 11' E ca. 650 m.

Area #2 21° 53' N 101° 18' E 700 m.

Area #3 21° 57' N 101° 20' E ca. 950 m.

Station 21° 55' N 101° 16' E ca. 600 m.

#1 Bat Cave 21° 53' N 101° 18' E

limestone #2 Bat Cave 21° 55' N 101° 20' E

#3 Bat Cave was in area #3 - we netted there
one night but no captures

granite #4 Bat Cave - lg. Hipposideros armingeri - on
opp. side of mt. from cave #2

Drive from Menglung to Kunming

- 1st night Szmao (570 km.)

1st lunch Tun Guan 通关

- 2nd night Yenjiang 元江

2nd lunch - Yu Xi Shan

B.R. Stein
1988

Journal

China: Menglung, Yunnan Prov.

tein, B. R.
1988

2 Aug. ca. 2 km. outside Mengla^{Yung}, Institute of Ecology, Academia Sinica
Field Station, Mengla^{Yung}, Yunnan Prov., PRC.

Drove south from Kunming ~~700~~⁶⁹⁸ km., turned east on 1st major/only turnoff. Continued ca. ~~60~~⁶⁵ km. to field station. Arrived about 7:00pm. About 9:00pm split into 3 groups - one set 3 lg. live traps for carnivores, one set up a mist net, and ours set out 2 lines of Victor's + museum specials. Used p.b. but expect little as ants will get it unless we have more substantial bait.

Drive in was continual up + down over the mountains. This is obviously rainforest but the extent of cultivation is enormous (and impressive in view of the human power used to terrace the hillsides). Brief intermittent rain showers along the way. Won't be able to assess vegetation in the immediate vicinity of the station until morning.

Actually flew from Kunming to Sgmao + drove from Sgmao to station. However, km. markers are from Kunming. Flight was prop. plane flying ~5,000' alt.; took 1 1/4 hrs. Sgmao is the southernmost airport in China.

3 Aug. Up at 7:15 am. to check traps. Because China has no time zones it is still dark. We must be ca. 2 hr. west of Beijing in terms of the sun. Went to see where Art had set up bat nets. Must have had 6 Rousettus - but he is letting them go! He checked them once, about

Stein, B.R.
1988

3 Aug.

an hour after he put them up + then left them all night. Can't believe he's letting stuff go — he says they're so common in Yunnan! Hope we can change his mind. He wants everything live for ectoparasites and may frown on our snap trapping. graham Hinkling got one Niviventer on traps we set at the last minute under the bridge by the main building. He wants guts, I'll tissue + then pickle.

We are definitely not in primary forest altho we did seem to drive through such an area about 10 min. before arriving here. Also the Institute has control over such an area which they did/would not even let us look at last year but are willing to this year. Nothing will probably be done until Wudelin gets here tonite. Art is now negotiating to get some lab space set up so we can begin processing animals. With the Chinese everything is one delay after another.

The area where our traps were set has palms, 6' grasses, and rubber trees being tapped. The bat nets went up in an area that had been cleared.

At 2:30 we were to go to 1° forest — instead got a tour of rubber, tea, coffee trees in the experimental station. Were finally taken to a small area of 2° forest to trap. Set out Shermans, Victors, Museum specials + one lg. high bat net. Won't be

Stein, B. R.
1988

3 Aug able to check them until tomorrow! Am tussuing and pickling this mornings' bats + rat + the Beijing Snake.

4 Aug. Caught a small Anolis-type lizard in the lab last nite. Tried to tissue it but there just wasn't much there.

This a.m. we were taken to our first area of primary forest - back out along the road we came in on, btwn. Km. marker 51 + 52. A really nice area; spent about 1 1/2 hr. walking the trail. After lunch it was to primary forest area #2 - about 2 km. down the road as it continues past the the entrance to the Institute. Also a nice area, but muddier. Spent about 1 3/4 hr. going along the trail - this time we brot some traps; set up a mist net. Not too many as we weren't sure what the area was like. We finished up at 4:00pm. Everyone else was ready to go back but Chris + I took 30 traps + went back + set them in area #1. It took only 1 3/4 hr. Both areas had streams but were relatively dry for rainforest. Have had no rain since we arrived + this is supposed to be monsoon season. Saw what was tentatively ID'ed as civet scat in area #1 - that area has lots more fruiting trees than area #2. Chris claims to have seen a squirrel + 2 "rats" scampering in the trees in area #2. Both have dense vegetation, the latter w/ periodic small clearings +

tein, B.R.
1988

4 Aug

unusual rock formations. Saw an old termite/ant mound w/ large openings → pangolin had been feeding there in the past.

Bot a bamboo rat from the locals for 6 yuan! Graham will keep it alive and try to get it to eat so he can measure digestive efficiency, etc. I've asked Art about the possibility of getting one pickled and there seems some hope. One way or another this one will end up as a specimen as Graham has no permits to bring things back to New Zealand. The locals also had 2 large monitor lizards they would have been happy to sell (they're sure we're eating the stuff) but, alas, no permits.

With much fanfare + commotion caught a *Hipposideros* in the room next to ours last nite. Art wants chromosomes - maybe I'll get the pickle.

5 Aug.

Light rain all night. Split into 2 groups to check traps. Chris + I went back to area number #1 - nothing, altho many of the traps had been sprung. I think it may have been the rain? The 2nd group fared no better, not even bats. From here on in we'll probably concentrate our efforts in area no. #1. We'll reset tonite and add a line of Snermans. Area #1 at least had more signs of animal life. Still overcast this morning altho no rain.

Stein, B.R.
1988

5 Aug.

Will use the "free time" to pickle the toad + the very small lizard I just grabbed.

6 Aug.

Rained hard all night, stopped by morning, started again by the time we checked traps — Nothing!

Much of the bait gone or Vectors set off — I think due to rain. The trail is really taking a beating.

Back at 10:00am today (vs. 9:00am previously to give you an idea of how the mud is making this all so much fun). Lunch at noon, out again ~1:15pm. to set them. By ~~now~~ 1:30pm. it began to pour!

Took off my glasses for the day — absolutely no way to pee up them in the driving rain. Setting is a bit of a joke, there's probably better ways to do it in pouring rain but I'm still learning.

If the forest is full of fruit why should they eat ours? Some may also not be this close to the trail. So far for bait we've tried potato, p.b., oat, peanuts, bananas, pineapple, worms.

By the time we reached the river bed it had swollen to 35' + was moving fast! The five of us waded downstream a ways, stowed our gear high, linked arms, + made it across in crotch deep H₂O. Driver was cruising a stretch of road looking for us. Such fun.

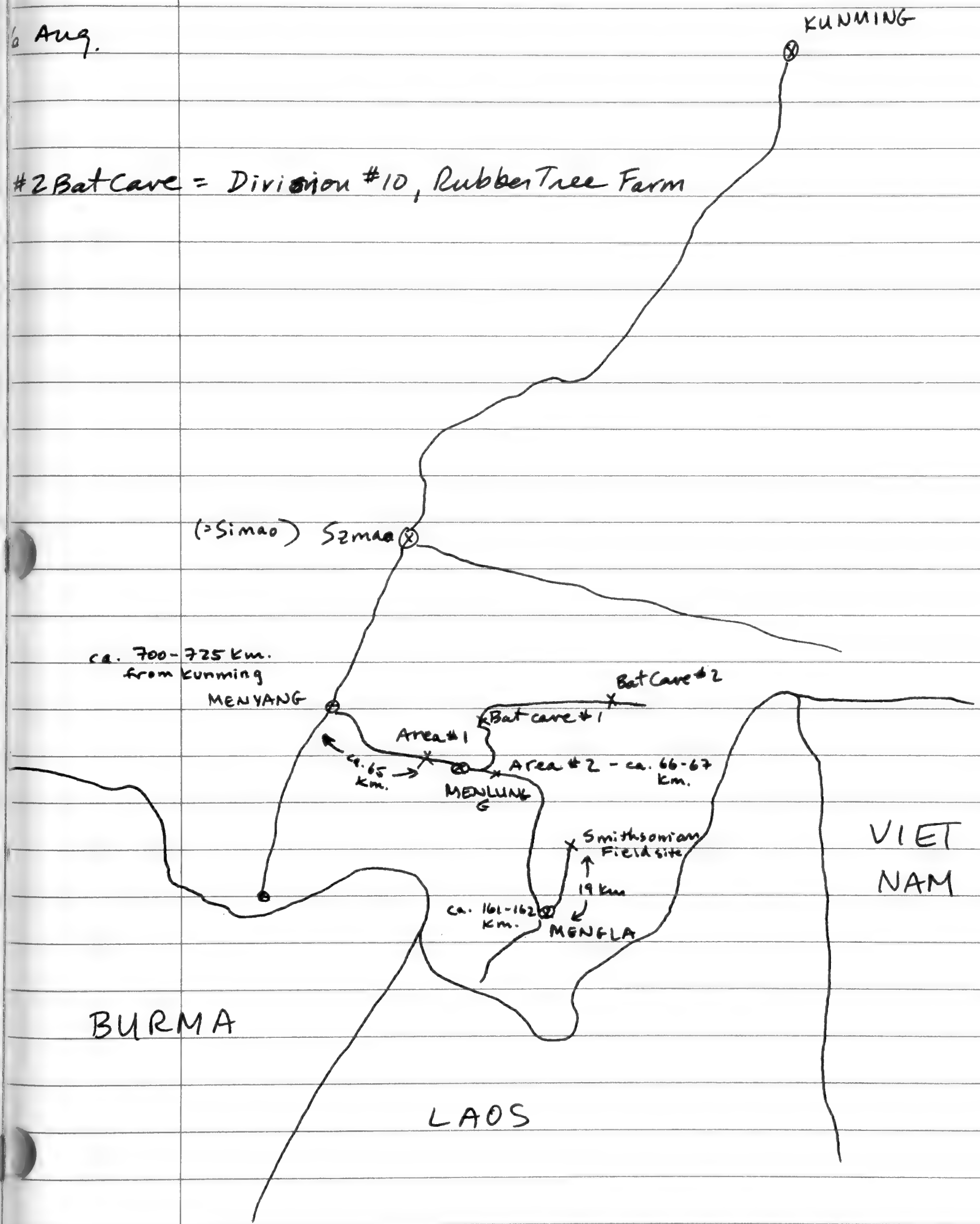
However, Graham + Chris did find one Rattus in pretty sorry shape from a morning trap!

Stem, BR
1988

NOT TO SCALE

6 Aug.

#2 Bat Cave = Division #10, Rubber Tree Farm



Stein, B.R.
1988

7 Aug. Rain most of the night. Nothing in the traps at area #1. Some still have the bait untouched. Two bats collected in net at entrance to area #2 - one Rousettus, one Cynopterus - Art says a new sp. from this region. Really discouraging. Decide to try one more night at area one. Reset all traps, moved those w/ any indication of ants or w/ unlikely placement - hope springs...

8 Aug. Rained from 8:00pm on last nite - pouring from about 2:00am till dawn. No way can we check area #1, the river will be too swollen, to say nothing of the trail itself which would be like a giant slalom mud course. Art went to check bat nets at area #2 after breakfast. The bamboo forest trip is postponed yet again + we've been up to 420 for 24hr, going on 36hr. Rained till 11:30am. Caught 2 bats again in area #2. After lunch the woman in the kitchen produced a Herpestes javanicus. She had mentioned yesterday that she had one in her yard so Steve gave her a trap. It's small but he may try putting a collar on it nonetheless. Headed out to pull all the traps at area #1. The blue Toyota made it to up in 2km. of the trail, then died. Not surprising since the oil light has been on + the thing is missing 3rd gear. We walked to the trail - only light rain thank goodness.

Stein BR
1988

8 Aug.

All the traps still empty and will need lots of clearing. Am glad that's our last trip as the trail has really been abused. Chris caught a small skink (?) for me. Don't understand why we haven't seen any salamanders!?

Graham caught 2 more rats for me - this time in traps set out by our kitchen. I hate to pickle everything but it's the only way I know of to get it out of here.

Steve did collar the mongoose + they managed to track it down after dinner. Art is putting out another bat net. Spent the evening tussling the day's catch. Tomorrow all our traps go over to area #2.

9 Aug.

A second mongoose, same sp., was brot in last nite. Steve collared that one too + Karen has stayed back today to track them every 1/2 hr. while we go set traps. Art decided the bamboo rat wouldn't live another day so he decided to take eyes, femur for chromo, gut, tissues, + then decided the skin wasn't so great - so I got to pickle it. Yeal for our side.

The trail to area #2 is as bad or worse than that for #1. No hand holds! Put out 100 phermans, some tomahawks + couabears, then quit. Left the remaining traps up there

Stein, BR
1988

9 Aug.

to be set tomorrow. Graham + Chris went to "the bamboo forest" today - a real disappointment - a very small patch or area that has been cut, burned, + grazed. Lots of leeches - no bamboo rats. Talk is now for us to visit the new Mengla Field Station on the 11th. Want to go but hate to lose the trap nites as our success is so low - this will probably be an overnight trip; roads + conditions dubious. The general weather pattern since the first few days has been rain most of the night, cloudy early morning, rain late morning, cloudy midday, light to heavy rain afternoon, on + off again early evening + on again at nite. Very humid always but not excruciatingly hot.

10 Aug.

A busload of Chinese arrived last nite - tourists! But why here?! Rain during the nite. One Pipistrellus in the net this a.m. Art leaves the nets open all day, doesn't move them, + doesn't check them during the night. No rain this a.m. or afternoon. Five us went back to area #2 to check traps + close them as we're to go to Mengla tomorrow. Put out rest of the Shermans + "snaps" so they'll be in place to bait when we return. Only

Stein, B.R.
1988

10 Aug.

one Rattus, ♀ that had 5 yg. in the trap. How disappointing. More time reading than in the field but these are the only areas they'll let us work. Dr. Wu got upset because Chis wandered off to do some exploring - was afraid he'd get lost - ha! What's worse, he missed lunch, a positive sin by Chinese standards. They never miss a meal. Chis claims to have found "bamboo rat heaven." I'd love to believe it was so.

11 Aug.

Today the proverbial shit hit the fan. Our plane reservations from Kunming to Hong Kong are screwed up + no one here is capable of straightening things out. We may have to leave here as early as the 14th if we are to get to H.K. in time for our flight - There's no way we can cancel those tickets. But what put the icing on the cake was our trip to Mengla today. Beautiful weather - no rain for 24hr. Art checked the bat net in the rubber tree grove at 7:00 am. only to find it had been stolen. We loaded the cars before 9:00 am. + headed off. Mengla is a 3hr. drive on the road that continues east from this field station. Beautiful mountains, most of which have

Stein, BR
1988

11 Aug.

been cleared + planted. Rice primarily, but also corn. We arrive in Mengla + are told it would be an hour until lunch so we get a "sightseeing tour" of town to kill time. Lots of PLA here as we are near the border now. After lunch it is just 19 km. North from town (the only big road heading north out of town) to the site of the proposed Man-in-the-Biosphere Smithsonian Field Station. This is 1° forest. The tallest trees we have seen in China. The Reserve has been divided into 2 sections, one north, one south of the road. The narrow neck of road and the land on either side of it is not part of the Reserve and hence, cultivated. So we finally arrive, the weather is glorious, and we are told we have 50 min. + then we head back! We could not walk too far up the road - "too dangerous". Not too far into the forest - "might get lost." That's when Art really began to lose it. (I, personally, would have thrown a gasnet 2 days ago, and nearly did).

We stopped on the way back to ^{check} ~~set~~ the 2nd bat net which had been up 24 hr!

Hein, BR
'1988

11 Aug.

2 Dead bats (which Art let me pickle), one live bat (which should have been put up tonight + will probably be dead by tomorrow), + 4 dead birds. What a waste. Dr. Wei, the ornithologist, took the birds, and tonight I saw them lying out on the window sill w/ identifications. But what will he do w/ them? Nothing probably. Wei has the most potential, is the most independent, but seems so handicapped by the system. How hard would it be to learn how to pickle birds. We got back in time for dinner, one I could have done easily w/o, + I asked Art about setting the Sherman's tonight. None of his undergrads has any real motivation and I could feel the negative messages from around the table as I even raised the subject. Art was to the point of steaming about the plane tickets as again we had made no headway on the problem all day. Art looked around + taking his cue from people's faces said we'd just set them in the morning. As I left dinner Graham offered to go w/ me if I wanted to set them. I would not have considered

Stein, BR
1988.

11 Aug.

it except that up rain for 24 hr. I knew that the trail would be as good as we might hope for. Getting a driver was another matter. God forbid they should have to work. Art + Vicki went out to set up another net in place of the one that was stolen. I didn't want to dawdle as it would be getting dark. Wu was throwing a fit — he felt he should go, then we'd need a bigger car. Different car means different drivers, more delays. I just said, "let's go" + we took off.

Graham + I did the line, up + back in record time. Got back, showered, + Art sent word I could pickle the 2 dead bats. As I went to the lab to work on them he was there. Turns out that Wu + Patrick got a 2nd car + followed them to the netting area. That's when Art let him have it, told him he'd uphold \$ for lost days, deduct \$ for new plane tickets, that we were here to work, not "sightsee", what kind of sloppy operation was this, and he just might not come back next yr. Andy Smith said you can never lose your

Stem, BR
1988

11 Aug

temper of the Chinese but I have to side w/
Art. How long do you let them jerk you
around? How long do you let them play
the \$ game? And for what? neither of
these 1st forest areas are anything like
the reserve area we visited today. Both
are much larger than we've seen yet
we are restricted from exploring. Both
are trafficked by "tourists" because
the Chinese have no sense of ecology
+ litter mercilessly. And yet they are
so sure they are right. This area is
beautiful, even the cultivated fields,
but there is so little of it left and it
is so poorly managed, or not managed
at all. I do not regret a minute of this
trip and in many ways it has been
most successful. But I am also
exceedingly grateful that I have no
need or desire to establish a long-term
research program here.

P.S. Since I got a bit "testy" w/ Patrick
2 days ago the water has not been
turned off once! How much bullshit
do they think I'll put up w/!

12 Aug.

Miracle of miracles - Mr. Fang, Dir. of the
Ecology Inst. in Kunming, has confirmed

Stein, BR
1988

12 Aug.

our reservations for the 20th! Will wonders never cease. That means Chris + I split the pool which bet on our day of departure. Another day morning. Eric went w/ Troy, Chris, Michelle + Graham to check the traps. One Rattus, again on Art's line. Tired this am. + glad to stay in. Went for a short walk w/ Karen + upon return it was time to tissue the bats Art had put up. Both were preg. ♀'s - one w/ yg. almost full-term, the other w/ well-developed yg. in placental sac. Pickled both yg. + one of the adults (Cynopterus). After lunch most of us went in search of the bat cave up in the hills on the 1st left turn-off on the way to area #2. Not a bad climb + the guide did all the work. The cave is quite spacious, but seemed to hold ~100 bats, including Hipposideros armingeri, which Art would really like to get. Placed one lg. net inside, 2 old ones across the main entrance + one across a large opening in the ceiling. Undoubtedly there are numerous small entrances + exits over which we have no control. The cave itself averages 12' in height, 30' at the rear, tapering off in

Stein, BR
1988

12 Aug.

several areas. Evidences of old campfires means we are not the first or the only visitors. The cave, main chamber, is easily 50' in length. There are 4 steps down into the main chamber from an outer room + some of the walls have been plastered. The best guess is that it was used by one side or the other during W.W. II or the Japanese invasion. I would expect the hillsides are full of such caves + that some might be / have been inhabited by the locals. Our guide scampered around + caught us one Rhinolophus by hand - such a perfect horseshoe noseleaf - much more impressive when alive than dead. The cave itself is probably 20° cooler than the outside air which today was hot + humid. You can feel the temp. drop as you approach through the vegetation. Water drips on the inside. Most of the area leading up to the cave ~~has~~ been cleared, some 2° growth remains.

Graham + Michelle spent a long, hot day trying to place our one bamboo rat live trap - which they eventually did. A brief, hard sun shower hit about 4:00pm - enough to make the trails a mess tomorrow,

Stem, BR
1988

12 Aug. and to wet the corn kernels the cook had set out in the middle of the driveway to dry. Tonite, hopefully get tissues from the rest of the specimens - the bats + the rat.

13 Aug. Art prepared only one bat after dinner - leaving 2 bats + the rat for today. After breakfast we checked the nets at the cave - 5 live bats, one dead and out covered in the net in the "ceiling". Of the live ones, a Hipp. auringer, 3 Rhinolophus, a Pipistrellus. Tissued all. ~~the~~ Went to area #2 to check bat net - nothing. Then went to check traps - again nothing, but pretty muddy. Got back before lunch + let Wu have it about the water. The Chinese tourists left after breakfast + w/ them so did Ho + elec. Amazing. Wu was quite indignant. I was so mad I skipped lunch. Plans changed after that as area #3 which we were to explore this aft. is only reachable by a 2hr. hike or boat ride. Art called their bluff on that one so after lunch we went back to area #2 + pulled all the traps so we could take them to area #3 in the morning. Too muddy + too few people - The undergrads don't have a lot of motivation and are sick a great deal. Miraculously, water appeared at the outdoor

Stein, BR
1988

13 Aug. showers upon our return. Art mentioned this Chinese guest / the correlation to Patrick who was most indignant. But no water today - and no water tomorrow - it's Sunday!

Cleaned traps tonite - yeck, then tissues. The word on the boat trip for tomorrow is there is no word right now. After dinner they said we couldn't get boats. That was charged to too much rain upstream, water too dangerous. Then there was the excuse of the wild elephants being dangerous. We should be so lucky to see an elephant. I don't know about upstream but we only had light sprinkles this afternoon in the way of rain. I can hardly wait for tomorrow.

14 Aug. Another cloudy A.M. Six of us were to go to area #3 of 1° forest. No boats, it was decided we would walk. Picked up our forestry guide, a 2° school student to help carry traps + the Director, Mr. Wei + Patrick went along for the fun. Started walking from the Dai village, through the cultivated fields + straight up the hillside like we've seen the villagers do. It was long, hot, steep and just a bit slick. A beautiful view from the top. You could look out + see how for miles + miles the forest had been cleared for agriculture. We hiked for about

Stein BR
1988

14 Aug

an hour which got us to the edge of the primary forest. Passed through a bamboo "forest" briefly. Patrick went on about the dangers - wild elephants, tigers, the white buffalo, etc. Altho area #3 is the largest of the 3 preserves once again we were only allowed on the periphery. How frustrating. And we had dragged all those traps along w/ us. I set about 80 altho the habitat seemed much the same to me as in the other areas we had worked. Had we gone by boat I can only guess that we would have approached the reserve from the other side and the climb would have been just as arduous.

Got back about 3:00 pm. All the others had gone out to a new bat cave, along the river, about 10 km. further/past the 1st cave of yesterday. It began to pour around 4:00 pm - a hard, steady driving rain. We waited. The other returned about 6:30 w/ a net of bats, a veritable gold mine. Mostly 2 genera - Tadarida + Taphozous. Art started on the dead ones first, the live ones he'll save till tomorrow (but they may be dead by then). What he wasn't up to skinning, I got to pickle. I tissueed everything + here it is midnite. I think he got 5 others at

Stein BR
1988

14 Aug

Cave #1. The rain continued till just a short while ago. I can't begin to think what the hillside will be like tomorrow + the troops are fighting not to go.

Steve recovered one abandoned radio collar today - in a woodpile 10 min. walk from here. It may have been Sunday but we had water all day until 6:45pm but no electricity. Electricity went on about then, died once about 9:00pm + will probably creak any minute now.

15 Aug

Light rain this morning. ^{Got} up of the electricity and wrapped up some of the alcoholics to make room in the bucket for what we'll do today. After some discussion I was able to stay here and tissue specimens while Chris + Troy went back up to area #3. Steve, Michelle, + Graham went to area #2 to get what traps were left, then Eric + Michelle checked bat nets - just one ^{fruit} bat, ^{Cynopterus}. Chris + Troy took 2 nets to area #3 + came back w/ 4 "Rats" - 3 Rattus(?), 1 Niviventer. Rain let up late morning. Started to pack up study skins + we came by all excited - can't pack till tomorrow after the forestry service guy comes + checks our specimens - we must pay for them. The alcoholics technically don't exist. Just

Stein, BR
1988

15 Aug

need to keep my frustrations in check for 2 more days.

4 Rats caught in high, rocky area where Graham set traps.

Tomb bats, Taphozous have few if any ECTOS. Prepared all but the one Niviventer - Art footied and he feels it is special.

16 Aug.

I caught a rat! In the 2nd to last Victor in my line. Didn't get off till 7:30am. Started walking from the station. It took 1 1/2 hr. to get up to area #3. It was a whole lot easier w/o hauling a bag of traps. No sooner did we arrive than the rains started. Pulled all the traps + redistributed them among the 8 of us, then headed down again. Used my walking stick which really made a difference. Graham + I walked ahead and had a nice talk. Asked me if I'd be interested in coming back again, not necessarily ~~from~~ to China, but to SE Asia. We would put together our own group and do it right. He's surer, than I am but he is just as frustrated.

Art got about a dozen bats, new sp. maybe, now he thinks it's just a larger Hipposideros armingeri. Interesting how each cave or area, particularly the caves, have only one or 2 types of bats.

161172B

